the serum of the blood was not milky: it did not contain a larger quantity of fat than healthy blood does.

The general results are,—

1. That the most important changes in the urine in this disease take place independently of the influence of digestion.

2. That the urine in one respect only resembles chyle, and that is in containing, after digestion, a large quantity of fat in a very fine state of division. The supposition that the disease consists in an accumulation of fat in the blood, which is thrown out by the kidneys, carrying with it albumen, fibrin, blood-globules and salts, is altogether disproved, both by actual analyses of the blood, and by the frequent occurrence of a jelly-like coagulum in the urine when no white fatty matter can be seen to be present.

3. The disease consists in some change in the kidney by which fibrin, albumen, blood-globules and salts are allowed to pass out, whenever the circulation through the kidney is increased; and if at the same time fat is present in the blood, it escapes also into the urine. That this change of structure is not visible to the naked eye on post-mortem examination, Dr. Prout long since demonstrated; and in a case of this disease which was in St. George's Hospital, and was examined at Plymouth, no disease of the kidney was observed. From the total absence of fibrinous casts of the tubes from the urine, it is not improbable that by the microscope a difference may be detected in the structure of the mammary processes, rather than in that of the cortical part of the kidneys.

March 21, 1850.

RICHARD OWEN, Esq., Vice-President, in the Chair.

The following letter from Mr. Addington to the Secretary was read.

Foreign Office, March 20th, 1850.

Sir,—I am directed by Viscount Palmerston to send to you, for the information of the President and Council of the Royal Society, an extract of a letter which his Lordship has received from Mr. James Richardson, stating that in the month of November last, a fall of aërolites had taken place on the coast of Barbary attended with a brilliant stream of light, which extended from Tunis to Tripoli, some of the stones falling in the latter city.

I am, Sir,

Your most obedient, humble Servant,

H. W. Addington.

The Secretary to the Royal Society.

"*Extract of a letter from Mr. Richardson, dated off Jerbah, 25th January* 1850.

"I will trouble your Lordship by the mention of the astronomic

phenomenon which terrified or arrested the attention of the inhabitants of the whole of this coast some two months ago. This was the fall of a shower of aërolites, with a brilliant stream of light accompanying them, and which extended from Tunis to Tripoli, some of the stones falling in the latter city.

"The alarm was very great in Tunis, and several Jews and Moors instinctively fled to the British Consulate, as the common refuge from every kind of evil and danger.

"The fall of these aërolites was followed by the severest or coldest winter which the inhabitants of Tunis and Tripoli have experienced for many years."

The reading of a paper, entitled "Discussion of Meteorological Observations taken in India at various heights." By Lieut.-Colonel Sykes, F.R.S. &c., was commenced, but was not concluded.

The Society then adjourned over the Easter recess, to meet again on the 11th of April.

April 11, 1850.

PROFESSOR OWEN, Esq., Vice-President, in the Chair.

Lieut.-Colonel Sykes's paper, entitled "Discussion of Meteorological Observations in India," was resumed and concluded.

The author adverts to a former paper "On the Meteorology of the Deccan," published in the Philosophical Transactions for 1835, and after referring to the conclusions at which he arrived in that communication, states that, in the discussion of the meteorological observations which form the subject of the present paper, and which were made over a very extended area, at different heights, some being hourly and running through several years at the same station, it is very satisfactory to find that they fully establish the accuracy of the former deductions. He remarks that, as some of the observations now discussed were hourly records continued through considerable periods of time, an opportunity has been afforded of investigating abnormal conditions, which the former limited number of diurnal observations did not permit; and gives the following review of what appears to be normal and abnormal conditions.

The annual and daily range of the barometer diminishes from the sea-level up to the greatest height observed, 8640 feet at Dodabetta, from a mean annual and mean daily range at Madras of 0·735 and 0·122 respectively to 0·410 and 0·060 at Dodabetta;—the annual range would appear to increase, about and beyond the northern tropic, as the annual range at Calcutta (not by hourly observations) is 0·911; but the diurnal range is somewhat less (0·115) than at Madras. At no one of the places of observation, even taking the maximum pressure of one year with the minimum pressure of another year, does there appear to have been a range of pressure equivalent